Claims after this response:

Claims 1-14 (Canceled)

15. (Withdrawn) The method of claim 13, wherein the distance value is determined by calculation of the Pearson correlation coefficient relative to the two vectors..

16. (Withdrawn) The method of claim 1, further comprising generating said pseudo-data vector from arbitrary data values.

Claims 17-20 (Canceled)

21. (Withdrawn) The method of claim 19, wherein said value for de-emphasizing is a null value.

Claims 22-47 (Canceled)

48. (Withdrawn) The system of claim 43, further comprising means for generating said pseudo-data vector from arbitrary data values.

Claims 49-64 (Canceled)

65. (Currently Amended) A computer-implemented method for displaying and manipulating data representing physical measurements, the method comprising:

storing, in a storage element of a computer implementing said method, an ordered data matrix comprising:

a plurality of measured values representing a plurality of different physical measurements performed on a plurality of samples;

a plurality of sample descriptive values corresponding to each sample, each sample descriptive value characterizing a corresponding sample independent of said measurements; and

a plurality of measurement descriptive values corresponding to each physical

measurement, each measurement descriptive value characterizing a corresponding type of measurement or measurement condition, independent of said samples;

providing a two dimensional detail graphic on a display of said computer, said graphic having a plurality of cells, each cell corresponding to one of said values in said data matrix, said graphic providing a view of a portion of said data matrix that is defined by a base location in said data matrix;

generating a pseudo-data vector comprising one value for each of said samples, said pseudo-data vector being calculated from said plurality of sample descriptive values or from said plurality of measurement descriptive values, independent of said measured values representing said physical measurements;

reordering said data matrix based on a measure of similarity between said pseudo-data vector and measured values of said data matrix; and

displaying on said display a new portion of said data matrix based on said re-ordering.

66. (Previously Presented) The method of claim 65, wherein said pseudo-data vector is generated by assigning numerical data values to a selected portion of said sample descriptive values.

67. (Previously Presented) The method of claim 66, wherein said selected sample descriptive values comprise binary data.

68. (Previously Presented) The method of claim 66, further comprising color-coding cells of said selected sample descriptive values, said color-coding representing a function of the sample descriptive values in the cells.

69. (Withdrawn) The method of claim 66, further comprising color-coding cells of said selected sample descriptive values, said color-coding representing the binary values of binary data.

70. (Previously Presented) The method of claim 66, wherein at least one cell of said data matrix lacks a sample descriptive value, and wherein said generation of said pseudo-data vector

further comprises assigning a predefined null value to said cell lacking a sample descriptive value.

71. (Currently Amended) The method of claim 67, wherein said binary data values in said selected portion of said sample descriptive values comprise annotative binary data values, and wherein said assigning numerical data values to a selected portion of said sample descriptive values comprises substituting predefined pseudo-data values for said positive and negative annotative binary data values ~~in said selected portion of said sample descriptive values~~.

72. (Previously Presented) The method of claim 66, further comprising inverting the numerical data values that are assigned to said selected portion of said sample descriptive values.

73. (Previously Presented) The method of claim 65, wherein said measure of similarity comprises calculating a distance value between the pseudo-data vector and a vector generated from a select set of said measured values.

74. (Previously Presented) The method of claim 73, wherein said distance value is determined by calculating a squared Euclidean distance between said two vectors.

75. (Previously Presented) The method of claim 65, wherein said calculating a pseudo-data vector comprises receiving values inputted by a user.

76. (Previously Presented) The method of claim 65, wherein said assigning numerical data values to a selected portion of said sample descriptive values comprises substituting a first predefined pseudo-data value for emphasizing each cell in a sub-portion of said selected portion of said sample descriptive values, and a second predefined pseudo-data value for de-emphasizing each remaining cell of said selected portion of said sample descriptive values.

77. (Previously Presented) The method of claim 76, wherein said first predefined pseudo-data value for emphasizing is a positive value inputted by a user.

78. (Previously Presented) The method of claim 76, wherein said predefined pseudo-data value for de-emphasizing is inputted by a user.

79. (Previously Presented) The method of claim 65, further comprising transmitting data

representing a result obtained to a remote location.

80. (Previously Presented) The method of claim 65, further comprising receiving a result obtained from a remote location.